

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

LIQUID DYNAMICS CORPORATION,)	
)	
Plaintiff,)	No. 01 C 6934
)	
v.)	Suzanne B. Conlon, Judge
)	
VAUGHAN COMPANY, INC.)	
)	
Defendant.)	

MEMORANDUM OPINION & ORDER

Liquid Dynamics Corporation (“Liquid Dynamics”) sued Vaughan Company, Inc. (“Vaughan”) for infringement of U.S. Patent No. 5,458,414 (“the ‘414 patent”) pursuant to 35 U.S.C. § 271 *et seq.* Specifically, Liquid Dynamics claimed Vaughan’s “RotaMix” commercial mixing system used the invention described in the ‘414 patent to prevent settling and separation of liquid and solid components stored in slurry tanks. Vaughan counterclaimed for invalidity and inequitable conduct.

Jury trial commenced on October 18, 2004. Vaughan’s motion for judgment as a matter of law at the close of Liquid Dynamics’ case, and both parties’ motions for judgment as a matter of law at the close of evidence, were denied. Dkt. Nos. 200, 206. On October 25, 2004, the jury returned a \$1,183,722.00 verdict in Liquid Dynamics’ favor on the willful infringement and invalidity claims. Dkt. No. 206. Vaughan’s renewed motions for judgment as a matter of law, a new trial, and to amend the answer and counterclaims to conform to the evidence were denied. Dkt. No. 213. On November 12, 2004, the court granted Liquid Dynamics’ motion for judgment as a matter of law on

the inequitable conduct claim. Dkt. No. 207. Final judgment was entered November 15, 2004. Dkt. No. 208.

Liquid Dynamics moves to amend the judgment to include enhanced damages under 35 U.S.C. § 284. Specifically, Liquid Dynamics asserts that an award of enhanced damages in the amount of \$2,367,444, trebling the \$1,183,722 compensatory damages award, is warranted.

DISCUSSION

The court may increase damages up to three times the jury award. *See* 35 U.S.C. § 284; *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 826 (Fed. Cir. 1992). “Determining whether an award of enhanced damages is merited is a two-step process: (1) the jury must determine whether an infringer is guilty of conduct warranting increased damages; and (2) the court determines, in its discretion, whether, and to what extent, to increase the damages award based upon the totality of the circumstances.” *Aero Prods. Int’l, Inc. v. Intex Recreation Corp.*, No. 02 C 2590, 2004 U.S. Dist. LEXIS 13453, *3 (N.D. Ill. July 15, 2004), *citing Jurgens v. CBK, Ltd.*, 80 F.3d 1566, 1570 (Fed. Cir. 1996). A jury finding of willful infringement satisfies the first step, and “upon a finding of willful infringement, a trial court should provide reasons for not increasing a damages award . . .” *Id.*; *see also Tate Access Floors v. Maxcess Techs.*, 222 F.3d 958, 972 (Fed. Cir. 2000). Nevertheless, “[a] finding of willfulness supports but does not mandate a damages enhancement. The question is the egregiousness of [Vaughan’s] conduct considering all the facts and circumstances.” *Amsted Ind., Inc. v. Buckeye Steel Castings Co.*, No. 88 C 0924, 1990 U.S. Dist. LEXIS 16657, *5 (N.D. Ill. Dec. 6, 1990); *see also Knorr-Bremse v. Dana Corp.*, 383 F.3d 1337, 1342-43 (Fed. Cir. 2004).

Specific factors to consider include: (1) whether Vaughan deliberately copied Liquid Dynamics' patented design; (2) whether Vaughan, when it knew of the '414 patent, investigated the patent's scope and formed a good-faith belief that its device was non-infringing; (3) Vaughan's behavior as a litigant; (4) Vaughan's size and financial condition; (5) the closeness of the case; (6) the duration of Vaughan's misconduct; (7) Vaughan's remedial actions; (8) Vaughan's motivation for harm; and (9) whether Vaughan attempted to conceal its misconduct. *See Read*, 970 F.2d at 827.

A. Deliberate Copying

The evidence submitted at trial supports a finding that Vaughan deliberately copied the '414 patent. For example, the evidence showed Liquid Dynamics began working on an Augusta, Georgia project in 1999. *See* Tr. 121, 124-25. The Augusta project was a privately negotiated deal, as opposed to a public bidding process. *See* Tr. 124. One of Liquid Dynamics' employees, Richard Behnke, worked on the project and participated in price quotations. *See* Tr. 121-22, 124-26. Vaughan hired Behnke soon after Liquid Dynamics terminated Behnke's employment. *See* Tr. 125, 346. Behnke worked on engineering drawings for Vaughan, and the drawings incorporated the same nozzle location, orientation, and floor-mounted system as Liquid Dynamics' Augusta drawings. *See* Tr. 350-51, 353-55; Mot. Exs. 6-10. One of Vaughan's witnesses, Glenn Dorsch, testified he had no knowledge of the Augusta project until Behnke was hired, and Vaughan never installed a floor-mounted mixing system prior to bidding on the Augusta project in early 2000. *See* Tr. 350-51, 356-57, 360. The Augusta project was awarded to Vaughan. *See* Tr. 127.

Further, Vaughan incorporated the Augusta drawings into its engineering manual as a template for other tanks. *See* Tr. 356-365; Mot. Exs. 6-7, 11. Finally, in submitting its engineering proposal for a Lewiston, Minnesota project, Vaughan certified that the Vaughan system would meet

the bid specification, which required the substantially helical flow pattern covered by the '414 patent. *See* Tr. at 365-67; Mot. Exs. 12-13. Together, the evidence supports a finding that Vaughan deliberately copied Liquid Dynamics' patented design.

Vaughan contends its engineering submission for the Lewiston project noted its dual nozzle arrangement would produce only a rotational flow, and thus highlighted an exception to the performance specification. *See* Tr. 366-69. Vaughan argues it also made explicit exceptions to other bid specifications that required a rotating toroid or helical flow pattern. *See* Resp. Ex. 7. Vaughan may offer a scintilla of evidence in its favor, however most of its arguments and characterizations are unsupported. *See* Resp. at 3-7. Further, the jury considered Vaughan's evidence pertaining to deliberate copying when it rendered its willful infringement verdict.¹ The evidence sufficiently supports the jury's determination and a finding of deliberate copying. Accordingly, the first factor weighs strongly in Liquid Dynamics' favor.

¹The jury was instructed: "To prove willful infringement, Liquid Dynamics must persuade you that it is 'highly probable' that Vaughan's infringement was willful. Specifically, Liquid Dynamics must demonstrate that: (1) Vaughan had actual knowledge of the '414 patent; and (2) Vaughan had no reasonable basis for believing that the accused installations do not infringe the '414 patent or that the '414 patent was invalid or unenforceable. In deciding whether Vaughan committed willful infringement, you must consider all of the facts, which include but are not necessarily limited to the following: (1) whether Vaughan intentionally copied Liquid Dynamics' slurry mixing apparatuses that are covered by the '414 patent; (2) whether Vaughan, when it knew of Liquid Dynamics' patent protection, investigated the scope of the patent and formed a good faith belief that the patent was invalid or unenforceable or that it was not infringed; (3) whether Vaughan made a good faith effort to avoid infringing the patent; and (4) whether Vaughan relied on a legal opinion that appeared to it to be well-supported and believable and that advised Vaughan that the accused apparatuses did not infringe the '414 patent or that the '414 patent was invalid or unenforceable. Mot. Exs. 15, 54.

B. Good Faith Belief of Non-Infringement

Vaughan contends it possessed a good faith belief of non-infringement because in August 2000 its patent attorney, Ward Brown, determined Vaughan's proposed systems would not infringe the '414 patent. *See* Tr. 1218-35. Brown, a member of Vaughan's trial team, recounted his opinion for the jury. *Id.* Reliance on legal advice may evidence good faith. *See e.g., SRI Int'l, Inc. v. Advanced Tech. Labs., Inc.*, 127 F.3d 1462, 1465 (Fed. Cir. 1997). Nevertheless, the jury found Vaughan wilfully infringed the '414 patent. Presumably, the jury disregarded Brown's testimony, resolved credibility determinations in Liquid Dynamics' favor, and rejected Vaughan's good faith defense. *See Amsted*, 1990 U.S. Dist. LEXIS 16657 at *6. The jury's determination was reasonable, given Brown's bias and interest in the case's outcome, and was supported by sufficient evidence, given the evidence of deliberate copying. Therefore, the second factor weighs slightly in Liquid Dynamics' favor.

C. Litigation Behavior

Liquid Dynamics asserts Vaughan's litigation behavior warrants enhanced damages. In support, Liquid Dynamics points to the deposition testimony of a Vaughan witness, the insufficiency of Vaughan's discovery production, and Vaughan's examinations at trial that, according to Liquid Dynamics, were wasteful of the court's and jury's time. These arguments do not support imposition of an enhanced damages award and they are disregarded. However, the record supports a finding that Vaughan's behavior as a litigant was inappropriate. The third factor weighs heavily in Liquid Dynamics' favor.

On *three* occasions, Vaughan attempted to introduce untimely expert opinion in violation of the court's scheduling order. *See* Dkt. Nos. 44, 74, 188. The court was required to review and

dissect numerous documents, particularly with respect to Vaughan's motions *in limine*, to identify and reject the untimely opinions.² Vaughan's conduct wasted judicial time and resources and placed an unnecessary and unreasonable burden on Liquid Dynamics.

Vaughan also disregarded the court's order granting its motion for leave to file an amended answer, affirmative defenses and counterclaims to add *specific*, newly discovered claims. Upon filing its answer, Vaughan included claims not disclosed to the court or Liquid Dynamics in its motion to amend. The court found "without prior leave of court, Vaughan attempts to inject a new inequitable conduct claim into a complex case without sufficient time for discovery," and struck the unauthorized affirmative defenses and counterclaims. *See* Dkt. No. 44-1. Vaughan's disingenuous conduct again unnecessarily burdened Liquid Dynamics and this court.

Two years after discovery closed, Vaughan issued an untimely deposition subpoena, without leave of court, without prior notification to opposing counsel, and with only four business days notice. The court granted Liquid Dynamics' emergency motion for a protective order and admonished "this is unreasonable and abusive conduct warranting sanctions if repeated by either party." *See* Dkt. No. 135-1. Vaughan admits it was "rightly chastised when the Court quashed the subpoena." *See* Resp. at 12.

When Liquid Dynamics moved to recover costs after its successful trial verdict, Vaughan argued Liquid Dynamics should not recover costs for 23 allegedly unnecessary depositions. The

²In striking the expert testimony submitted in support of Vaughan's motion *in limine*, the court held "Vaughan's attempt to submit new opinion testimony by calling it 'fact' and trying to squeeze it under the parameters of generalized statements from the May 2002 report is appalling. The Dorsch affidavits are replete with inappropriate new opinions . . . It is disingenuous for Vaughan to assert generalized statements in the Dorsch/Keeran report . . . cover his elaboration more than two and a half years after the close of discovery." Dkt. No. 188 at 28-29.

court found Vaughan's argument disingenuous given Vaughan's representation, when it sought deposition transcript costs after successfully moving for summary judgment, that depositions for 22 of the *same witnesses* were necessary. *See* Dkt. 96-1, 264-1 at 2.

Vaughan's irresponsible litigation behavior continues. The court, on its own motion and due to the unavailability of complete trial transcripts at the time of original filing, ordered the parties to supplement their briefs with specific citations to record evidence that supports each argument. *See* Dkt. 259-1. In its response brief, Vaughan argues:

LD asserts that Vaughan never denied copying, despite the huge amount of evidence Vaughan introduced proving the differences between its designs and anything taught in the '414 patent: the use of fixed double nozzles (instead of rotatable single nozzles), placed high in the tank (instead of close to the floor), inward directed nozzles (instead of outward directed) to create turbulence at the tank center, placement of the sump in the tank center to draw the tank contents *inward* at the intersection of the tank floor and tank centerline (rather than *outward* as the claims require), and others. [Trial Trans., p. 41].

Resp. at 3 (bolded text added). The *single* page Vaughan cited not only fails to support the assertion, it does not constitute evidence. Indeed, the record at page 41 constitutes a portion of Vaughan's counsel's opening statement. Vaughan's egregious pattern of inappropriate conduct unreasonably proliferated this litigation and wasted judicial resources. Accordingly, Vaughan's blatant disregard for the court's and Liquid Dynamics' time and resources supports an enhanced damages award.

D. Size and Financial Condition

Liquid Dynamics contends Vaughan's size and financial condition is sufficient to satisfy an enhanced damages award because: (1) in 2001, Vaughan retained earnings in the amount of \$5,077,508, a \$1,357,486 growth from 1999; (2) a recent D&B report shows Vaughan's net worth is \$6,058,911 and its credit rating is very high; and (3) Vaughan's earnings in 2003 were

\$18,790,813, and its projected 2004 earnings were approximately \$19,500,000. Mot. at Exs. 32-34. Vaughan does not challenge the accuracy of Liquid Dynamics' evidence. Instead, Vaughan contends it is a small, family-held company in rural Washington and "[a]lthough Vaughan is slightly larger than [Liquid Dynamics] its sales of mixing systems in the relevant time period were minimal in comparison to [Liquid Dynamics]." Vaughan's arguments are irrelevant to its ability to satisfy an enhanced damages award. The fourth factor weighs in Liquid Dynamics' favor.

E. Closeness of Case

Vaughan argues its successful summary judgment motion, reversed by the Federal Circuit in a 2-1 decision, demonstrates this was an extremely close case. *See Liquid Dynamics Corp. v. Vaughan Company, Inc.*, 355 F.3d 1361 (Fed. Cir. 2004). Liquid Dynamics responds this was not a close case because the jury returned a verdict in Liquid Dynamics' favor on all issues, and the court granted Liquid Dynamics' Rule 52(c) motion at the close of Vaughan's inequitable conduct case. Both parties present valid arguments. Accordingly, the fifth factor - closeness of the case - does not strongly favor either party.

F. Motivation for Harm

Vaughan argues it had no motivation to harm Liquid Dynamics because Larry Vaughan, Vaughan's acting president, testified regarding the parties' cordial relationship, that Vaughan wished to retain Liquid Dynamics' business and that his company would never infringe another company's patent. *See* Tr. 1056-57, 1061-62. The jury evidently rejected Larry Vaughan's self-serving testimony. In any event, Vaughan's intent to harm is reflected by evidence, proffered by its own damages expert, that Vaughan would have incurred a maximum cost of \$104,000 to utilize non-infringing alternatives. *See* Tr. 1198-20. Instead, Vaughan deliberately chose to infringe the patent

and litigate. *See e.g., Exxon Chem. Patents, Inc. v. The Lubrizol Corp.*, No. H-89-3203, 1994 U.S. Dist. LEXIS 17820, *6 (S.D. Tex. 1994) (“Lubrizol claimed at the trial on damages that it could have used non-infringing products instead of Exxon’s formulation at little additional cost, but instead continued to infringe . . . Lubrizol showed no motive for its conduct other than to harm its major competitor”), *rev’d on other grounds*, 64 F.3d 1553 (Fed. Cir. 1995). Therefore, the sixth factor weighs strongly in Liquid Dynamics’ favor.

G. Remaining Factors

None of the three remaining factors weigh in Vaughan’s favor. First, Liquid Dynamics contends Vaughan’s efforts to conceal its misconduct are evidenced by the minor details Vaughan added to its RotaMix system in an attempt to camouflage its willful infringement. Specifically, Liquid Dynamics asserts Vaughan simply added an additional nozzle to the lower nozzle of Liquid Dynamics’ commercial embodiment of its patented system. Second, with respect to the duration of misconduct, Liquid Dynamics contends: (1) Vaughan admittedly knew of the ‘414 patent before it began infringing; (2) Vaughan infringed for over a year and a half before Liquid Dynamics filed suit; (3) Vaughan’s infringement continued after the lawsuit was filed and before discovery closed; and (4) Vaughan’s infringement began in 1999, yet it failed to retain a patent lawyer until after it was “caught” in connection with the Augusta, Georgia project. Finally, Liquid Dynamics contends Vaughan has not disclosed evidence of any remedial actions, such as the sale or offer for sale of any alternative, non-infringing floor-mounted mixing system.

Vaughan does not offer any substantive responses to these arguments. Vaughan’s only assertion, other than to baldly deny the allegations, is that it “is no longer designing Rotamix systems having multiple nozzles within the protected band and has thus taken appropriate remedial action

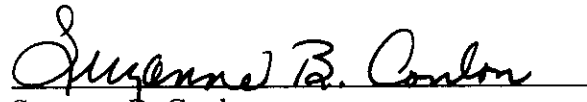
pending the appeal of the judgment.” Vaughan’s assertion is completely unsupported and, given an unfavorable liability finding and the court’s recent issuance of a permanent injunction, *see* Dkt. No. 260-1, lacks merit.

CONCLUSION

After considering all facts and circumstances, particularly Vaughan’s behavior as a litigant, the court in its discretion finds enhanced damages are appropriate. Liquid Dynamics is awarded \$2,367,444 in enhanced damages pursuant to 35 U.S.C. § 284.

March 22, 2005

ENTER:


Suzanne B. Conlon
United States District Judge